

*Sertifikaat*

REPUBLIC OF SOUTH AFRICA

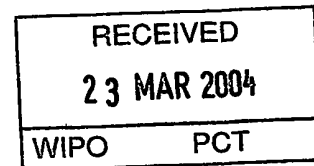
PATENT KANTOOR  
DEPARTEMENT VAN HANDEL  
EN NYWERHEID



REPUBLIC VAN SUID-AFRIKA

PATENT OFFICE  
DEPARTMENT OF TRADE AND  
INDUSTRY

Hiermee word gesertifiseer dat  
This is to certify that



the documents annexed hereto are true copies of:

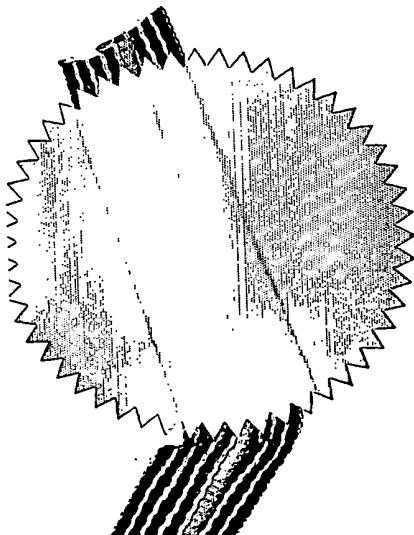
Application forms P.1, P.2, provisional specification and drawings  
of South African Patent Application No. 2002/8595 as originally filed  
in the Republic of South Africa on 24 October 2002 in the name of  
LIONEL NICOLAS MANTZIVI for an invention entitled:  
"BAGS WITH HANDLES".

Geteken te  
Signed at  
**PRETORIA**

in die Republiek van Suid-Afrika, hierdie  
in the Republic of South Africa, this

dag van  
day of  
**18<sup>th</sup> February 2004**

Registrar of Patents



**PRIORITY DOCUMENT**  
SUBMITTED OR TRANSMITTED IN  
COMPLIANCE WITH  
RULE 17.1(a) OR (b)

PATENTS ACT, 1978

REPUBLIC OF SOUTH AFRICA

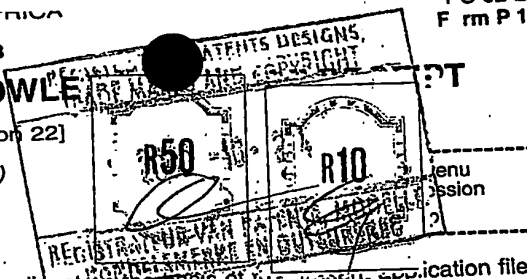
## REGISTER OF PATENTS

Official application No.		Lodging date: Provisional		Acceptance date	
24 0002/8595		22 2002-10-24		47	
International classification		Lodging date: Complete		Granted date	
51		23			
Full name(s) of applicant(s)/Patentee(s):					
71 LIONEL NICOLAS MANTZIVI					
Applicants substituted:				Date registered	
71					
Assignee(s):				Date registered	
71					
Full name(s) of inventor(s):					
72 LIONEL NICOLAS MANTZIVI					
Priority claimed	Country	Number	Date		
	33	31	32		
	33	31	32		
	33	31	32		
Title of invention					
54 BAGS WITH HANDLES					
Address of applicant(s)/Patentee(s)					
46 ST CHRISTOPHER RD BEDFORDVIEW 2001 JOHANNESBURG.					
Address for service					
74 P.O. Box 2262 RANDFONTEIN 1760.					
Patent of addition No.		Date of any change			
61					
Fresh application based on		Date of any change			

## APPLICATION FOR PATENT AND ACKNOWLEDGEMENT

[Section 30 (1)—Regulation 22]

(See notes overleaf)



The grant of a patent is hereby requested by the undermentioned applicant on the basis of his present application filed in duplicate.

Official Application No.	
21	01 2002/8595

(i)	Applicant's or agent's reference
-----	----------------------------------

(ii)	Full name(s) of applicant(s)	LIONEL NICOLAS MANTZIVI
(iii)	Address(es) of applicant(s)	46 ST CHRISTOPHER RD BEDFORDVIEW JOHANNESBURG 2001

(iv)	Title of invention	BAG WITH HANDLE
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(v)	The applicant claims priority as set out on the accompanying form P 2.
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(vi)	This application is for a patent of addition to Patent Application No.	
21	01	

(vii)	This application is a fresh application in terms of section 37 and based on Application No.	
21	01	

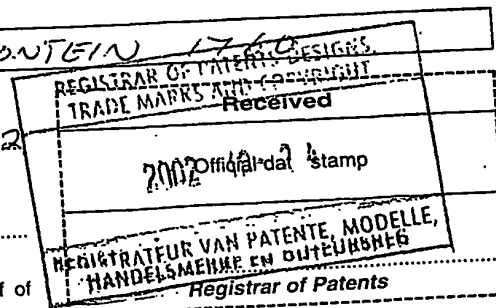
(viii)	This application is accompanied by:
1.	A single copy of a provisional or two copies of a complete specification of.....6.....pages.
2.	Drawings of...../.....sheets.
3.	Publication particulars and abstract (form P 8 in duplicate).
4.	A copy of Figure.....of drawings (if any) for the abstract.
5.	An assignment of invention.
6.	Certified priority document(s) (state number).
7.	Translation of the priority document(s).
8.	An assignment of priority rights.
9.	A copy of the form P 2 and the specification of S.A. Patent Application No.
10.	A declaration and Power of Attorney on form P 3.
11.	Request for ante-dating on form P 4.
12.	Request for classification on form P 9.
13.	

(ix)	Address for service:	P.O. BOX 2862 RANDFONTEIN 1760
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Dated this 24 day of OCTOBER 2002

Signature of applicant(s) or agent

The duplicate will be returned to the applicant's address for service as proof of lodging but is not valid unless endorsed with official stamp.



REPUBLIC OF SOUTH AFRICA  
PATENTS ACT, 1978  
DECLARATION AND POWER OF ATTORNEY  
(Section 30 - Regulation 8, 22(i)(c) and 33)

FORM P.3

PATENT APPLICATION NO  
21 01 42002/8595

REF:

LODGING DATE  
22 2002-10-24

FULL NAME(S) OF APPLICANT(S)

71

LIONEL NICOLAS MANTZIVI

FULL NAME(S) OF INVENTOR(S)

72

LIONEL NICOLAS MANTZIVI

EARLIEST PRIORITY CLAIMED	COUNTRY	NUMBER	DATE
33		31	32

NOTE: The country must be indicated by its International Abbreviation - see schedule 4 of the Regulations

TITLE OF INVENTION

54

BAGS WITH HANDLES

\* I/we

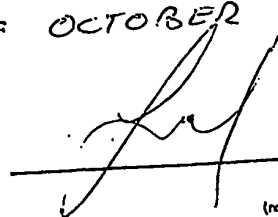
hereby declare that :-

- \* 1. I/we am/are the applicant(s) mentioned above;
- \* 2. I/we have been authorized by the applicant(s) to make this declaration and have knowledge of the facts herein of the applicant(s);
3. the inventor(s) of the abovementioned invention is/are the person(s) named above and the applicant(s) has/have acquired the right to apply by virtue of an assignment from the inventor(s);
4. to the best of my/our knowledge and belief, if a patent is granted on the application, there will be no lawful ground for the revocation of the patent;
- \*\* 5. this is a convention application and the earliest application from which priority is claimed as set out above is the first application in a convention country in respect of the invention claimed in any of the claims; and
6. the partners and qualified staff of the firm of , patent attorneys, are authorised, jointly and severally, with powers of substitution and revocation, to represent the applicant(s) in this application and to be the address for service of the applicant(s) while the application is pending and after a patent has been granted on the application.

SIGNED AT

THIS 24 DAY OF OCTOBER

2002

  
SIGNATURE(S)  
(no legalization necessary)

- \* In the case of application in the name of a company, partnership or firm, give full names of signatory/signatories, delete paragraph 1, and enter capacity of each signatory in paragraph 2.
- \*\* If the applicant is a natural person, delete paragraph 2.
- ... If the right to apply is not by virtue of an assignment from the inventor(s), delete "an assignment from the inventor(s)" and give details of acquisition of right.
- ... For non-convention applications, delete paragraph 5.

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PATENTS ACT, 1978

## PROVISIONAL SPECIFICATION

(Section 30(1) - Regulation 27)

Official Application No.		Lodging Date	
21	01. 2002/ 8595	22	2002 10-24

Full name(s) of applicant(s)
71 LIONEL NICOLAS MANTZIVI

Full name(s) of inventors(s)
72 LIONEL NICOLAS MANTZIVI

Title of invention
54 BAGS WITH HANDLES

**Bag with handles**

The current invention relates to a method and process of manufacturing a package, and/or, bag with a handle.

The package and /or bag can also be manufactured to be closed at one or both ends with a built in handle.

**Background to the invention**

The packaging industry in South Africa is very competitive and manufactures are looking for ways to enhance their products.


In one area notably the polyethylene and woven polypropylene manufactures are offering packaging systems with handles attached to and punched into the bags.

Many have labours processes to manufacture these types of bags and packaging systems.

The inventor is unaware of any prior art in this field

The inventor is aware of the methods of manufacturing of different types of containers and bags from woven polypropylene and polyethylene.

The inventor envisages a future process in the manufacture of the said container or bag as to the automated process in the construction of a block bottom valve bag or container and is understood as the invention.



According to a first aspect of the invention there is provided

- A process for the manufacture of a bag or container
  - from a woven plastic material, a plastic film, paper or the like, namely with the use of a machine, but can be produced by means of a manual process.
  - namely a block bottom bag.

According to second aspect of the invention there is provided

- A process for closing the said bag or container at defined positions by means of heat welding, sewing, sound or the like, by an automated process or by hand.

According to a third aspect of the invention there is provided

- A process for creating a handle using the bags material, and/ or a separate piece of material and / or insertion of an object to act as a handle.

In one embodiment, a container is manufactured according to the first aspect of the invention.

According to the second aspect of the invention a strip of material used to close or create the bottom and or top of the bag, used in forming the cover piece to secure one or two ends of the said bag. The said strip is of a width greater than that of the block bottom size, the section formed at one or more ends.

This said strip of material can be folded and then pasted, welded or sewn to the bottom section of the T that is formed if the bag is looked at from a side view block bottom, that is created in the forming of the bag, that will create a double layer of material, a hole that will be used as the handle can then be introduced.



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The bag constructed in such a manner will give the handle strength in two directions, as the bonding, or weld is weak in one of the directions.

Alternatively this strip can be left unfolded and used as the handle.

It understood that this is a closed end, or bag.

The said bag can be of an open mouth type or valve.

Where the said bag is of the open mouth type it can be filled then closed.

Once the bag is filled it can then picked up by the two handles.

It is understood that the material between the sewn portions that are the handles, will be cut so to allow access to the product Contained in the bag, and once the said product is used or the bag emptied, the bag can then be used for some other means.

In another embodiment, a container is manufactured according to the first aspect of the invention.

According to the second aspect of the invention a strip of material used to close or create the bottom and or top of the bag, used in forming the cover piece to secure one or two ends of the said bag. A second strip, of a width greater than that of the block bottom size, is pasted, welded or sewn to the section that has formed the block bottom at one or more ends.

In another variant of the said process the bottom layers may be folded in on themselves to cover a protective unit so that the said folded portion does not rest directly on themselves but on the protective unit. This unit can be made of a metal or any other solid material.

The top layer can then be folded in on it's self to cover the folded bottom portion of the fabric that is resting on a separating material in the said process.

Where the two layers overlap there is a device that causes the two materials to bond, either by heat, sound, glue or any other means.



At a given position the two adjacent folded layers are bonded together by any of the above means.

The bonded portion becomes a double-layered portion of the said package, or bag.

A handle can be attached to this portion of the unit, or a handle can be introduced by means of punching a hole or slot to the said double layer of material.

The said handle would be in an area above the bonded portion if the bag is to be bonded at a specific position or would fall into an area that is bonded but would not allow any of the contents of a filled package to escape when in any position.

Thus it is said that the bag can have at least one end, two reinforced or double layers of fabric that will be suitable for imbedding a handle or a attaching a device that will serve as a handle.

It is also understood that at least one end of the said bag it would be closed, and that at this position there would be one or two of the said handles.

It is also understood that at this position a portion of the material can be cut to open the said bag, and to have at least two handles to carry the said bag with an open mouth.

It is envisaged that this bag, once the contents have been emptied can be further used for other means.

It is understood that this manufacturing process can be in stages or can be in a continuous process.

It is understood that this process can be automated (made by a machine) but can also be done by a human.



The invention will now be described, by way of non-limiting examples only, with references to the accompanying drawings.

In the drawings,

Figure 1 shows in schematic representation, a block bottom bag broadly in accordance with the invention;

Figure 2 shows in schematic representation, a bottom of a block bottom bag with a pasted layer / handle, broadly in accordance with the invention;

Figure 3 shows in schematic representation, a bottom of a block bottom bag with an integrated cloth handle, broadly in accordance with the invention;

Figure 4 shows in schematic representation, a bottom of a block bottom bag with an inserted plastic handle, broadly in accordance with the invention;

Figure 2b shows in schematic representation, a side view of a block bottom bag broadly in accordance with the invention;

Figure 3b shows in schematic representation, a side view of a block bottom bag broadly in accordance with the invention;

2002/859

In figure 1, reference numeral 15 indicates a folded, pasted, welded or glued block bottom

In figures 3, 3b, 4 and 4b, reference numerals 11 indicates a closed separate area or cavity of the bag,

In figures 3, 3b, 4 and 4b, reference numerals 11b indicates a weld, or welded area of the bag,

In figures 2 and 3, reference numerals 10 indicates a punched handle,

In figures 2, 2b, 3, 3b, 4 and 4b, reference numerals 16 indicates an area that is of the main bag,

if this area is cut it will open the bag,

In figures 2, reference numerals 14 indicate holes within the closed area as described above,

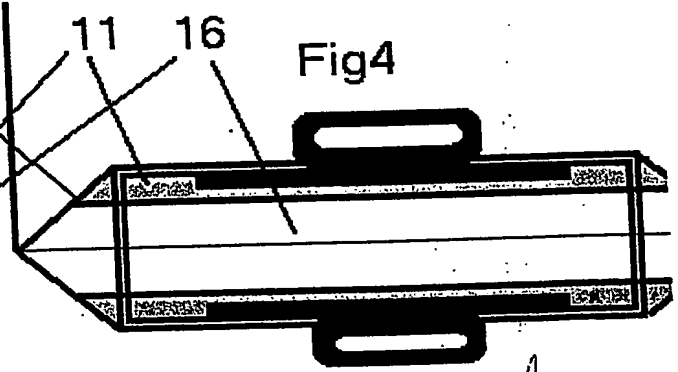
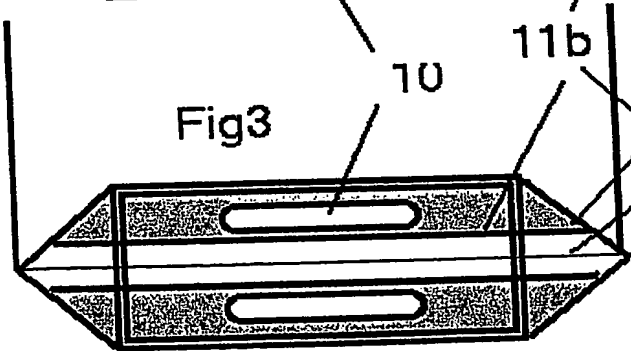
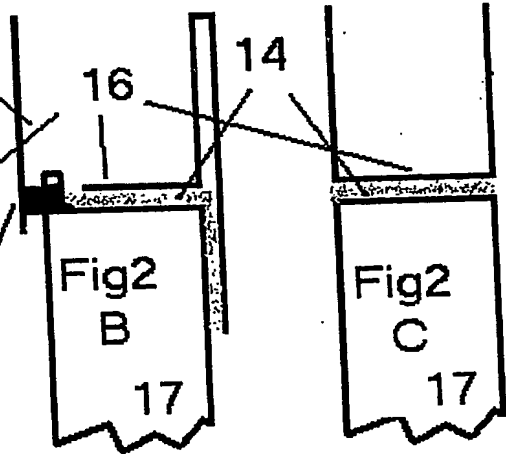
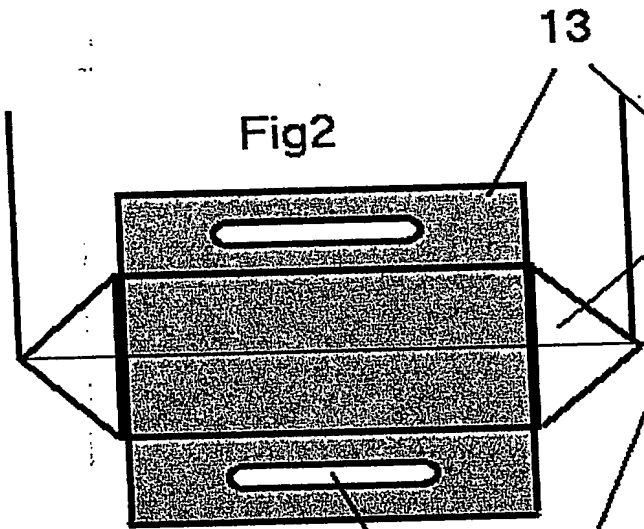
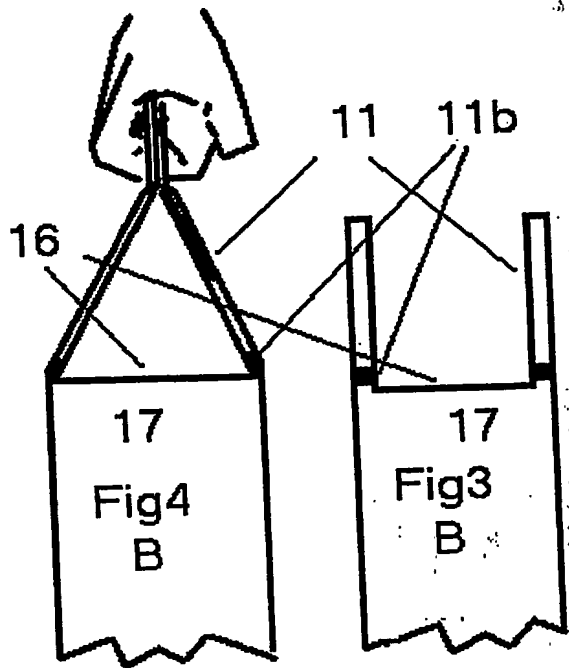
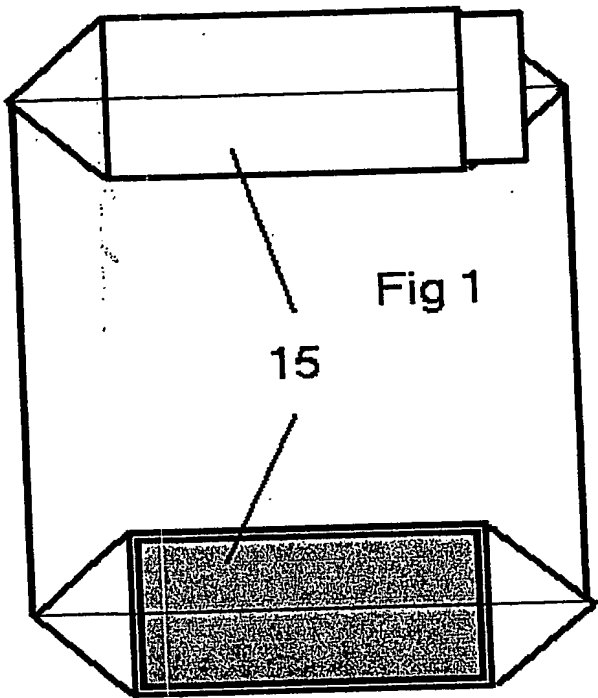
In figures 2b, reference numerals 14 indicate welding, sewing or pasting in this area so that when the bag is lifted the handle fabric provides strength in two directions,

In figures 2b, reference numerals 11b indicate welding, sewing or pasting in this area,

In figures 2b, 2c, 3b and 4b, reference numerals 17 indicates the main area of the bag,

In figures 3 and 3b, reference numerals 13 indicates an area that is of the main bag, if this area is cut it will open the bag,

  
DATED THIS 24th DAY OF OCTOBER 2002



Dated this 24 Day of October 2002